Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, and Chapter 140 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300, and 9 VAC 5-140-10 through 9 VAC 5-140-900 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Virginia Electric and Power Company
Facility Name:	Dominion – Darbytown CT Station
Facility Location:	6001 Fergus Boulevard Richmond, Virginia 23231
Registration Number:	50997
Permit Number:	PRO50997

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Sections I through VII)
Federally Enforceable Requirements – NO_X Budget Trading Requirements (Section VIII)
Federally Enforceable Requirements – Clean Air Interstate Rule (CAIR) Requirements (Section IX)

May 27, 2008
Effective Date

May 27, 2013
Expiration Date

Kyle I. Winter, P.E.
Deputy Regional Director

Signature Date

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Permit Conditions, 31 pages

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I. Facility Information

Permittee
Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, Virginia 23060

Responsible Official
Mr. O. Preston Sloane
Director – Fossil & Hydro Station III

Facility
Dominion – Darbytown CT Station
6001 Fergus Boulevard
Richmond, Virginia 23231

Contact Person
Cathy C. Taylor
Director, Electric Environmental Services
804-273-2929

County-Plant Identification Number: 51-087-0156

Facility Description: NAICS 221112 – Electric Power Generation
SIC 4911 – Electrical Services

The Virginia Electric Power Dominion – Darbytown CT Station is an electric power generation facility. Natural gas is received via gas pipelines to operate up to four General Electric Model PG711-EA simple cycle turbines each rated at 1,308 MMBtu/hr on natural gas. No. 2 fuel oil is also available to fire any or all of the turbines, which are rated at 1,250 MMBtu/hr on No. 2 fuel oil.

The turbines were originally installed in 1989 and all turbines are subject to the requirements of 40 CFR 60, Subpart GG. The facility is a Title V major source of SO_2 and NO_X pollutants. This source is located in an attainment area for all pollutants and is a minor source under PSD regulations. The area is a VOC control area with an EPA approved maintenance plan. The facility was originally permitted under a NSPS permit issued on September 7, 1989. Since then, this permit and the Title V permit have been amended as follows:

- May 1, 2000 - The facility was modified to add inlet air-cooling.
- January 10, 2003 - Permit amended to clarify ambiguous terms relating to the operation of the inlet air cooling system.
- June 1, 2003 – Title V issued.
- December 1, 2003 – Title V amended to add NO_X Budget Program.
- September 16, 2004 – Title V amended to further clarify periodic monitoring of the turbines.
- May 27, 2005 – Permit amended to add in Appendix A from NSPS, Subpart GG.
- July 14, 2005 – Title V amended to add in Appendix A from NSPS, Subpart GG.
- March 28, 2008 – Permit amended to install and operate wet compression systems.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
ES-1a	EP-1	General Electric PG7111-EA Turbine Unit 1 firing gas	1308 MMBtu/hr	water injection	CD-1	NO_X	3/28/08
ES-1b	EP-1	General Electric PG7111-EA Turbine Unit 1 firing oil	1250 MMBtu/hr	water injection	CD-1	NO_X	3/28/08
ES-2a	EP-2	General Electric PG7111-EA Turbine Unit 2 firing gas	1308 MMBtu/hr	water injection	CD-2	NO_X	3/28/08
ES-2b	EP-2	General Electric PG7111-EA Turbine Unit 2 firing oil	1250 MMBtu/hr	water injection	CD-2	NO_X	3/28/08
ES-3a	EP-3	General Electric PG7111-EA Turbine Unit 3 firing gas	1308 MMBtu/hr	water injection	CD-3	NO_X	3/28/08
ES-3b	EP-3	General Electric PG7111-EA Turbine Unit 3 firing oil	1250 MMBtu/hr	water injection	CD-3	NO_X	3/28/08
ES-4a	EP-4	General Electric PG7111-EA Turbine Unit 4 firing gas	1308 MMBtu/hr	water injection	CD-4	NO_X	3/28/08
ES-4b	EP-4	General Electric PG7111-EA Turbine Unit 4 firing oil	1250 MMBtu/hr	water injection	CD-4	NO_X	3/28/08

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

III. Fuel Burning Equipment Requirements

The emission units associated with this section of the permit are the following: ES-1a and b, ES-2a and b, ES-3a and b, and ES-4a and b

A. Limitations

1. Nitrogen oxide emissions from the simple cycle combustion turbines shall be controlled by the utilization of water injection when firing natural gas and No.2 distillate fuel oil. The simple cycle combustion turbines shall be provided with adequate access for inspection.

   (9 VAC 5-80-110, 9 VAC 5-50-260, 40 CFR 60.332, and Condition 3 of the 3/28/08 Permit)

2. Sulfur dioxide emissions from the simple cycle combustion turbines shall be controlled by the use of low sulfur fuels.

   (9 VAC 5-80-110, 9 VAC 5-50-260, 40 CFR 60.333 and Condition 4 of the 3/28/08 Permit)

3. Particulate matter emissions from the simple cycle combustion turbines shall be controlled by the use of clean burning fuels and good combustion operating practices.

   (9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 5 of the 3/28/08 Permit)

4. Volatile organic compounds and carbon monoxide emissions from the simple cycle combustion turbines shall be controlled by the use of good combustion practices.

   (9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 6 of the 3/28/08 Permit)

5. To comply with the short-term emissions limits in this permit, the control system for each inlet air cooling system and each wet compression system shall be programmed with interlocks such that each cooling system can only be operated when the ambient air temperature exceeds 60º F and the associated turbine is operating at a load that exceeds 60 megawatts.

   (9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-50-20 C, and Condition 7 of the 3/28/08 Permit)

6. The Inlet Air Conditioning Systems and the Wet Compression Systems, for each of the four gas turbines, shall only be used when the combustion turbines are operating at 60 megawatts or greater.

   (9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260 and Condition 13 of the 3/28/08 Permit)

7. The approved fuels for the simple cycle combustion turbines are pipeline quality natural gas (primary fuel) and No. 2 distillate fuel oil (back-up fuel). Distillate oil is defined as fuel oil that meets the specifications for Fuel Oil Numbers 1 or 2 under the American Society for Testing and Materials, ASTM 396-78 Standard Specification for Fuel Oils, or other approved ASTM method, incorporated in 40 CFR 60 by reference. A change in the fuels may require a permit to modify and operate.

   (9 VAC 5-80-110, 9 VAC 5-80-1100, and Condition 14 of the 3/28/08 Permit)

8. The maximum sulfur content of the natural gas to be burned in the simple cycle combustion turbines shall not exceed 0.06 weight percent.

   (9 VAC 5-80-110, 9 VAC 5-80-1100, 9 VAC 5-50-260, and Condition 16 of the 3/28/08 Permit)

9. The maximum sulfur content of the oil to be burned in the simple cycle combustion turbine shall not exceed 0.20 weight percent per shipment (as defined in Appendix A). The maximum Fuel Bound Nitrogen (FBN) content of the oil to be burned in the simple cycle combustion turbine shall not exceed 0.05 weight percent per shipment (as defined in Appendix A).

   (9 VAC 5-80-110, 9 VAC 5-170-160, 9 VAC 5-50-260, and Condition 17 of the 3/28/08 Permit)

10. The four simple cycle combustion turbines combined shall not consume more than the quantity of natural gas and No. 2 distillate oil fuel annually, calculated monthly as the sum of each consecutive 12 month period, as follows:

    a. Natural gas – 3,100,000,000 scf annually when firing natural gas 100% of the time.

    b. No. 2 distillate oil – 13,600,000 – 2,100,000 * (FBN – 0.015)/0.035 gallons annually when firing No. 2 distillate oil 100% of the time. Fuel Bound Nitrogen (FBN) is equal to % FBN by weight annual average, but not less than 0.015% firing No. 2 distillate oil 100% of the time.

    c. When the four simple cycle combustion turbines are firing both No. 2 distillate oil and natural gas during the period individually or in combination, the annual consumption shall be limited by the following equation to limit NO_X and SO_2 to less than 250 tons per year, where: (scf natural gas used/ 3,100,000,000 scf) + (gallons of No. 2 distillate oil used/ No. 2 distillate oil limit in gallons from b.) is less than or equal to 1.

   (9 VAC 5-80-110, 9 VAC 5-80-1100, and Condition 15 of the 3/28/08 Permit)

11. Short-term emission limits from the operation of each simple cycle combustion turbine while fired on natural gas shall not exceed the limits specified below (except during start-up, shutdown and malfunction conditions):

Particulate Matter			6.3	lbs/hr
PM-10			6.3	lbs/hr
Sulfur Dioxide	5.1×10^{-2}	lbs/MMBtu	66.0	lbs/hr
Nitrogen Oxides (as NO_2)	42	ppmdv @ 15% O_2	199.4	lbs/hr
Volatile Organic Compounds			2.0	lbs/hr
Carbon Monoxide			26.5	lbs/hr

   (9 VAC 5-80-110, 9 VAC 5-50-260, 40 CFR 60.332-3, and Condition 18 of the 3/28/08 Permit)

12. Short-term emission limits from the operation of each simple cycle combustion turbine while fired on No. 2 distillate fuel oil shall not exceed the limits specified below (except during start-up, shutdown and malfunction conditions):

Particulate Matter	12.5	lbs/hr
PM-10	12.5	lbs/hr

Sulfur Dioxide	2.0×10^{-1}	lbs/MMBtu	253.7	lbs/hr
Nitrogen Oxides (as NO_2)	65*	ppmdv @ 15% O_2	321.6	lbs/hr
*(Fuel Bound Nitrogen less than 0.015% by weight)				
Nitrogen Oxides (as NO_2)	77**	ppmdv @ 15% O_2	381.4	lbs/hr
**(Fuel Bound Nitrogen less than or equal to 0.05% by weight)				
Volatile Organic Compounds			6.3	lbs/hr
Carbon Monoxide			28.6	lbs/hr

(9 VAC 5-80-110, 9VAC 5-50-260, 40 CFR 60.332-3, and Condition 19 of the 3/28/08 Permit)

13. The terms "start-up" and "shutdown" shall be defined as follows:

    Start-up: The period, for each unit start command, from the beginning of "warm up" control mode or from the point a restart is issued for a running unit in shutdown mode and continuing to the end of the first hour of water injection logging for NO_X control.

    Shutdown: The period, for each unit stop command, from when the control "shutdown" mode begins and continuing until no fuel is being combusted or until a restart command is received, whichever occurs first.

    (9 VAC 5-80-110, 9 VAC 5-170-160, and Condition 20 of the 3/28/08 Permit)

14. Visible emissions from the simple cycle combustion turbines shall not exceed ten percent (10%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

    (9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-50-80 and Condition 22 of the 3/28/08 Permit)

15. Combustion turbine emissions shall be controlled by proper operation and maintenance. Turbine operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.

    (9 VAC 5-80-110 and 9 VAC 5-50-20)

16. Except where this permit is more restrictive than the applicable requirement, the simple cycle combustion turbines shall be operated in compliance with all applicable requirements of 40 CFR Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines.

    (9 VAC 5-80-110, 40 CFR 60.330, and Condition 23 of the 3/28/08 Permit)

17. Except where this permit is more restrictive than the applicable requirement, the combustion turbine generating station shall comply with all applicable provisions of 40 CFR Part 75.

    (9 VAC 5-140-10 et seq. and 40 CFR 75)

B. Monitoring

1. A continuous monitoring system shall be installed and operated (as approved by the DEQ) to indicate/determine and record the hourly fuel consumption (in scf/hour and gallons/hour) and the ratio of water to fuel oil being fired in the simple cycle combustion turbine. The system

shall be accurate to within ±5.0 percent and shall be approved by the DEQ, Piedmont Regional Office (PRO). The monitoring system shall be operated at all times that water is being injected into the simple cycle combustion turbines. The monitoring system shall be maintained and calibrated in accordance with the manufacturer's specifications. A 30 day notification prior to the demonstration of continuous monitoring system performance is to be submitted to the DEQ, Piedmont Regional Office. The permittee shall maintain the records of the simple cycle combustion turbine fuel oil consumption and ratio of water to fuel oil being fired at the site. These records shall be kept on file for the most current five-year period and available for inspection by DEQ personnel.

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-50-20 C, 40 CFR 60.334, and Condition 8 of the 3/28/08 Permit)

2. The permittee shall monitor the sulfur content of the natural gas being fired in the simple cycle combustion turbines, in accordance with Subpart GG of the NSPS and the US EPA custom fuel monitoring schedule, approved on July 2, 1998. These records shall be available on site for inspection by the DEQ and kept on file for the most current five-year period.

   (9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-50-20 C, and Condition 9 of the 3/28/08 Permit)

3. The permitted facility shall not be required to monitor the nitrogen content of the natural gas fuel (previously required by NSPS Subpart GG). The nitrogen-monitoring requirement has been waived, by the Administrator of the US EPA, in the US EPA custom fuel-monitoring schedule, approved on July 2, 1998.

   (9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-50-20, 40 CFR 60.334, and Condition 10 of the 3/28/08 Permit)

4. The permittee shall perform visible emissions observations (VEO's) on the exhaust stack of each General Electric Model PG7111-EA simple cycle combustion turbine (ES-1, ES-2, ES-3, and ES-4) according to the following schedule:

   a. At least one VEO shall be conducted on each unit that operates for a cumulative total of 20 hours or more during the calendar year.

   b. At least one VEO shall be performed during each 200 hours of unit operation during the calendar year.

   c. At least one VEO shall be performed during any unit operability verification testing conducted during the calendar year.

   d. Each VEO shall be performed for a sufficient period of time to identify the presence of visible emissions. If no visible emissions are observed, no action shall be required. However, if visible emissions are observed, a visible emissions evaluation (VEE) shall be conducted using 40 CFR Part 60, Appendix A, Method 9 for a period of no less than 6 minutes. If the average opacity exceeds 10%, modifications and/or repairs shall be performed to correct the problem and the corrective measures shall be recorded. If such corrective action fails to remedy the opacity problem, a VEE in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be performed for a period of at least 18 minutes to determine compliance with the opacity limits specified in Condition III.A.14 of this permit. The VEE observer shall be Method 9 certified.

   (9 VAC 5-80-110)

5. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to the combustion turbines:

   a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for the turbines.

   b. Develop an inspection schedule, monthly at a minimum, to insure operational integrity of the turbines and maintain records of inspection results.

   c. Have available written operating procedures for the turbines. These procedures shall be based on the manufacturer's recommendations, at a minimum, if such recommendations exist.

   d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

   Records of maintenance, inspections, and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request.
   (9 VAC 5-80-110, 9 VAC 5-40-20, 9 VAC 5-50-20, and Condition 36 of the 3/28/08 Permit)

6. **Compliance Assurance Monitoring (CAM) -** The permittee shall monitor, operate, calibrate and maintain the water injection controlling the simple cycle combustion turbines according to the following:

Monitoring, Frequency, Records	Performance Criteria	Indicator Range; Averaging Period
• Continuously monitor fuel consumption and the water-to-fuel ratio. • Records shall be collected by a computerized system. The system shall collect and retain all relevant data.	• Fuel and water flow meters to have minimum accuracy of 5% and to be calibrated prior to each stack testing event.	• Indicator range: Shown in the table below. • Excursion: Water-to-fuel ratio outside the indicator range. • Data points shall be collected every minute, averaged over a 1-hour block period.

Indicator Range for Water-to-Fuel Ratio	
Load, percent	**Water-to-Fuel Ratio Indicator Range**
50	Greater than 0.30
75	Greater than 0.40
100	Greater than 0.60

7. **Compliance Assurance Monitoring (CAM) -** The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
   (9 VAC 5-80-110 E and 40 CFR 64.6(c))

8. **Compliance Assurance Monitoring (CAM) -** At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

   (9 VAC 5-80-110 E and 40 CFR 64.7(b))

9. **Compliance Assurance Monitoring (CAM) -** Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the simple cycle combustion turbines are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.

   (9 VAC 5-80-110 E and 40 CFR 64.7(c))

10. **Compliance Assurance Monitoring (CAM) -** Upon detecting an excursion or exceedance, the permittee shall restore operation of the simple cycle combustion turbines (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.

    (9 VAC 5-80-110 E and 40 CFR 64.7(d)(1))

11. **Compliance Assurance Monitoring (CAM) -** Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

    (9 VAC 5-80-110 E and 40 CFR 64.7(d)(2))

12. **Compliance Assurance Monitoring (CAM) -** If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Piedmont Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

    (9 VAC 5-80-110 E and 40 CFR 64.7(e))

13. **Compliance Assurance Monitoring (CAM) -** If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the simple cycle combustion turbines for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

    a. Improved preventative maintenance practices;

    b. Process operation changes;

    c. Appropriate improvements to control methods;

    d. Other steps appropriate to correct control performance; and

    e. More frequent or improved monitoring.

    (9 VAC 5-80-110 E and 40 CFR 64.8(a) and (b))

C. Recordkeeping

1. The continuous water to fuel ratio monitor required by this permit, the continuous monitoring data, and the quality assurance data shall, at the discretion of the Board, be used in calculating emissions to determine compliance with the NO_X emission limits and/or relevant emission standards. Each monitor is subject to such data capture requirements and/or quality assurance requirements as specified in this permit and as may be deemed appropriate by the Board (40 CFR 60.13 and 40 CFR 60 Appendix B).

   (9 VAC 5-80-110, 9 VAC 5-160-170, and Condition 28of the 3/28/08 Permit)

2. The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

    a. Annual and specific hours of operation of the Inlet Air Conditioning Systems and Wet Compression Systems, annual hours calculated monthly as the sum of each consecutive 12 month period.

    b. Continuous megawatt generation rate during the period in which the Inlet Air Conditioning Systems and Wet Compression Systems are in operation.

    c. Hourly, monthly, and annual consumption of natural gas and fuel oil. Annual consumption to be calculated monthly as the sum of each consecutive 12 month period. Ratio of water to fuel for each fuel being fired shall accompany the hourly consumption record.

    d. Tests of the sulfur content of natural gas being fired in accordance with Subpart GG of the NSPS and the US EPA custom fuel monitoring schedule, approved on July 2, 1998.

    e. Tests for the sulfur and nitrogen content of all shipments (as defined in Appendix A) of fuel oil delivered to the facility.

f. Calculations to demonstrate compliance with the fuel limitation requirements for any annual period when fuel oil was fired.

g. Monthly and annual calculations of nitrogen oxides, sulfur dioxide, and carbon monoxide emissions based on water/fuel ratios, monitoring and fuel analysis data, annual emissions calculated monthly as the sum of each consecutive 12 month period.

h. Results of all stack tests, visible emission evaluations and performance evaluations.

i. A record of opacity observations, including corrective action or Method 9 observation results.

j. Continuous monitoring system calibrations and calibration checks.

k. Scheduled and unscheduled maintenance of the turbines and associated monitoring systems.

l. Records of operator training.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent (5) years.

(9 VAC 5-80-110, 9 VAC 5-50-50, 40 CFR 60.334-5, and Condition 29 of the 3/28/08 Permit)

3. **Compliance Assurance Monitoring (CAM) Recordkeeping -** The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

(9 VAC 5-80-110 E and 40 CFR 64.9(b))

D. Testing

1. The permittee shall test the No.2 distillate fuel oil for sulfur and nitrogen content on each occasion that fuel is transferred (as referenced in Appendix A) to the storage tanks, from any other source or fuel vendor. Fuel oil sulfur content shall be determined using ASTM D2880-78 or another approved ASTM method incorporated in 40 CFR 60 by reference. Fuel oil nitrogen content shall be determined by following current ASTM procedures approved by the Administrator of the US EPA. Initial test methods and changes to test methods used by the permittee to determine sulfur and nitrogen content shall be submitted to and approved by the Piedmont Regional Office (PRO) of the DEQ. Records of fuel oil sulfur and nitrogen content shall be available on site for inspection by DEQ personnel. They shall be kept on file for the most current five year period.

   (9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-50-20 C, 40 CFR 60.334-5, and Condition 11 of the 3/28/08 Permit)

2. Stack emission tests shall be conducted for nitrogen oxides from the simple cycle combustion turbines when using the Wet Compression Systems to determine compliance with the emission limits contained in Conditions III.A.11 and 12. These tests shall be conducted on one representative turbine under the following specifications: At ≥ 60 MW load using the wet compression system for (1) when only natural gas is being burned and (2) when only distillate oil is being burned. The tests shall be performed and demonstrate compliance with

Conditions III.A.11 and 12 within 60 days after achieving the maximum production rate for the simple cycle combustion turbines when using the Wet Compression Systems but in no event later than 180 days after start-up of the Wet Compression Systems on the simple cycle combustion turbines. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and 9 VAC 5-60-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410 and 9 VAC 5-60-70. The details of the tests are to be arranged with the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Piedmont Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-80-110, 9 VAC 5-50-30, 9 VAC 5-80-1200, and 9 VAC 5-50-410, and Condition 25 of the 3/28/08 Permit)

3. Every twenty (20) operating calendar quarters (starting from the initial test completed), or upon request by the DEQ, the permittee shall conduct performance tests for nitrogen oxides from the simple cycle combustion turbines to demonstrate compliance with the emission limits contained in this permit. Results from these tests shall also be used to verify the accuracy of emission factors used in emissions estimates. The details of the tests shall be arranged with the Director, Piedmont Regional Office. The permitee may comply with this condition in accordance with the requirements of 9 VAC 5-140-700 et seq. and 40 CFR 75.

   (9 VAC 5-80-110, 9 VAC 5-50-30 G, 9-VAC 5-140-10 et seq., 40 CFR Part 75, and Condition 26 of the 3/28/08 Permit)

4. Upon request by the DEQ, the permittee shall conduct performance tests for sulfur dioxide, carbon monoxide, particulate matter, PM-10 and/or volatile organic compounds from the simple cycle combustion turbines to demonstrate compliance with the emission limits contained in this permit. Results from these tests shall also be used to verify the accuracy of emission factors used in emissions estimates. The details of the tests shall be arranged with the Director, Piedmont Regional Office.

   (9 VAC 5-80-110, 9 VAC 5-50-30 G, and Condition 26 of the 3/28/08 Permit)

5. Upon request by the DEQ, the permittee shall conduct visible emission evaluations from the simple cycle combustion turbines to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Director, Piedmont Regional Office.

   (9 VAC 5-80-110, 9 VAC 5-50-30 G, and Condition 27 of the 3/28/08 Permit)

6. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.

   (9 VAC 5-80-110)

E. Reporting

1. The permittee shall submit quarterly excess emission reports to the Piedmont Regional Office (PRO) of the DEQ within 30 days after the end of each calendar quarter or semi-annually as needed. Details of the quarterly reports are to be arranged with the Piedmont Regional Office (PRO). Each quarterly report shall cover, at a minimum, the dates included in the calendar quarter and provide the following information for each day in the quarter, report each hour during which the water to fuel ratio fell below that required to demonstrate compliance with the nitrogen oxides permit limit, copy of the written notification and corrective action taken. The report shall include the following for each period described above: start time, duration, actual and required water-to-fuel ratio, fuel type and consumption rate,

nitrogen content of fuel oil (if oil-fired), ambient temperature and the simple cycle combustion turbine load. If, during the calendar quarter, there are no times when the water to fuel injection ratio fell below that required to demonstrate compliance, the permittee shall state in the quarterly report that no such events occurred during the affected calendar quarter.

(9 VAC 5-80-110, 9 VAC 5-170-160, 9 VAC 5-50-50, 40 CFR 60.7, 40 CFR 60.334, and Condition 30 of 3/28/08 Permit)

2. **Compliance Assurance Monitoring (CAM) Reporting** - The permittee shall submit CAM reports as part of the quarterly or semi-annual reports required by Condition III.E.1 and General Condition C.3 of this permit to the Director, Piedmont Regional Office. Such reports shall include at a minimum:

   a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

   b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

   c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

   (9 VAC 5-80-110 F and 40 CFR 64.9(a))

IV. Facility Wide Conditions

A. Limitations

1. The total annual emissions from the electric generating facility shall not exceed the limits specified below:

Particulate Matter	9.5	tons/yr
PM-10	9.5	tons/yr
Sulfur Dioxide	193.2	tons/yr
Nitrogen Oxides (as NO_2)	245.5	tons/yr
Volatile Organic Compounds	4.8	tons/yr
Carbon Monoxide	32.6	tons/yr

Annual emissions calculated monthly as the sum of the previous consecutive twelve month period.
(9 VAC 5-80-110, 9 VAC 5-50-260, 40 CFR 60.332-3, and Condition 21 of the 3/28/08 Permit)

2. Except where this permit is more restrictive than the applicable requirement, the fuel oil storage tanks shall be operated in compliance with all applicable requirements of 40 CFR Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels. At the time of issuance of this permit, the only applicable requirement is to maintain and make available on site drawings and specifications documenting the dimensions and capacity of each tank, so long as the tanks are used exclusively for fuel oil.
(9 VAC 5-80-110, 9 VAC 5-50-400, 9 VAC 5-50-410, 40 CFR 60.110b, 40 CFR 60.116b, and Condition 24 of the 3/28/08 Permit)

B. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-80-110, 9 VAC 5-50-30 F, and Condition 12 of the 3/28/08 Permit)

2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110)

V. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity 9 VAC 5-80-720 C)
IS-1*	Two No. 2 Fuel Oil Storage Tanks	9 VAC 5-80-720B	VOC	3,125,000 gallons each
IS-2	Three Oil/Water Separators	9 VAC 5-80-720B	VOC	350 to 2000 gallons
IS-3	Natural Gas Heaters	9 VAC 5-80-720C	PM, CO, VOC, SO_2, NO_X	6.87 MMBtu/hr total
IS-4	Turbine Glycol Cooling Systems (4)	9 VAC 5-80-720B	VOC, HAP	Less than 1000 gallons total
IS-5	Turbine Lube Oil Systems (4)	9 VAC 5-80-720B	VOC	Less than 15,000 gallons total

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

* Record keeping is required for this unit only (see Condition IV-A-2).

VI. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
9 VAC 5-40-900	Particulate Matter Standard for Fuel Burning Equipment	Conditions III-A-11 and III-A-12 set limits exceeding this emission standard
9 VAC 5-40-930	Sulfur Dioxide Standard for Fuel Burning Equipment	Conditions III-A-11 and III-A-12 set limits exceeding this emission standard
40 CFR 60, Subpart KKKK	Standards of Performance for Stationary Combustion Turbines	This Subpart does not apply to the combustion turbines since the construction of these units commenced before February 18, 2005.
40 CFR 63, Subpart YYYY	National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines	This Subpart does not apply to the combustion turbines since they are considered existing units and are exempt pursuant to 40 CFR 63.6090(b)(4).

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

VII. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.

3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.

4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

a. The date, place as defined in the permit, and time of sampling or measurements.

b. The date(s) analyses were performed.

c. The company or entity that performed the analyses.

d. The analytical techniques or methods used.

e. The results of such analyses.

f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

   (9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

   a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.

   b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:

      (1) Exceedance of emissions limitations or operational restrictions;

      (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,

      (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

   c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”

   (9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to

§114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.

2. The identification of each term or condition of the permit that is the basis of the certification.

3. The compliance status.

4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.

6. Such other facts as the permit may require to determine the compliance status of the source.

7. One copy of the annual compliance certification shall be sent to EPA at the following address:

   Clean Air Act Title V Compliance Certification (3AP00)
   U.S. Environmental Protection Agency, Region III
   1650 Arch Street
   Philadelphia, PA 19103-2029

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Piedmont Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3 of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Piedmont Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Regional Office.

(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.

(9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.

   (9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

   (9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be

calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.

(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;

4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.

   (9 VAC 5-80-160)

2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the

change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.

(9 VAC 5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.

   (9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

   a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

   b. The permitted facility was at the time being properly operated.

   c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

   d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.

4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend,

under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C and 9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

Z. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.

2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.

3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

VIII. NO_x Budget Trading Program Requirements

A. NO_x Budget Permit General Conditions

1. A review of the air emission units included in this permit approval has determined that the equipment listed in the following table meets the definition of a NO_X Budget Unit and falls subject to the NO_X Budget emission limitations under 9 VAC 5-140-40 or for opt-in sources 9 VAC 5-140-800. As required by 9 VAC 5-140-200 A, each NO_X Budget source is required to have a federally enforceable permit. This section of the document represents the NO_X Budget permit.

   (9 VAC 5-140-40) or (9 VAC 5-140-800)

2. The NO_X Budget permit will be administrated by the VADEQ under the authority of 9 VAC 5-80-360 et seq., and 9 VAC 5-140-10 et seq.

   (9 VAC 5-140-200 A)

3. The following air emission unit(s) have been determined to meet the applicability requirements as provided in 9 VAC 5-140-40 A.1 and A.2., and the air emission unit(s) have been determined to meet the applicability requirements to be considered a Low Mass Emissions (LME) Unit as provided in 40 CFR 75.19. To maintain this classification, it is the owner's responsibly to limit NO_X emissions from these individual units to less than 100 tons of NO_X annually (October 1 thru September 31) and no more than 50 tons of the allowed annual tons of NO_X during the ozone control period (May 1 thru September 30).

   (9 VAC 5-140-40 A)

Table X – 1
Facility NO_X Budget Units

Facility Unit ID	Unit NATS Code	Unit Name and description	Maximum Heat Capacity (MMBtu/hr)	Maximum Generation Capacity (megawatts)
1	007212-000001	General Electric PG7111-EA Turbine Unit 1 firing gas and oil	1308 (gas) 1250 (oil)	92
2	007212-000002	General Electric PG7111-EA Turbine Unit 2 firing gas and oil	1308 (gas) 1250 (oil)	92
3	007212-000003	General Electric PG7111-EA Turbine Unit 3 firing gas and oil	1308 (gas) 1250 (oil)	92
4	007212-000004	General Electric PG7111-EA Turbine Unit 4 firing gas and oil	1308 (gas) 1250 (oil)	92

4. This NO_X Budget permit became effective on May 31, 2004.

B. Standard Requirements

1. Continuous Monitoring requirements.

a. The owners and operators and, to the extent applicable, the NO_X authorized account representative of each NO_X Budget source and each NO_X Budget unit at the source shall comply with the monitoring requirements of 9 VAC 5-140-700 et seq.

b. The emissions measurements recorded and reported in accordance with (9 VAC 5-140-700 et seq.) (Subparts H of 40 CFR 75 and 40 CFR 97) shall be used to determine compliance by the unit with the NO_X Budget emissions limitation under Conditions VIII.B.2.a. through VIII.B.2.h.

2. Nitrogen oxides requirements.

a. The owners and operators of each NO_X Budget source and each NO_X Budget unit at the source shall hold NO_X allowances available for compliance deductions under 9 VAC 5-140-540 A, B, E, or F, as of the NO_X allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NO_X emissions for the control period from the unit, as determined in accordance with Article 8 (9 VAC 5-140-700 et seq.), plus any amount necessary to account for actual utilization under 9 VAC 5-140-420 E for the control period or to account for excess emissions for a prior control period under 9 VAC 5-140-540 D or to account for withdrawal from the NO_X Budget Trading Program, or a change in regulatory status, of a NO_X Budget opt-in unit under 9 VAC 5-140-860 or 9 VAC 5-140-870.

(9 VAC 5-140-60 C.1)

b. Each ton of nitrogen oxides emitted in excess of the NO_X Budget emissions limitation shall constitute a separate violation of the Clean Air Act, and applicable Virginia Air Pollution Control law.

(9 VAC 5-140-60 C.2)

c. A NO_X Budget unit shall be subject to the requirements under 9 VAC 5-140-60 C.1 starting on the later of May 31, 2004 (or the date on which the unit commences operation if the date falls within the Control Period).

(9 VAC 5-140-60 C.3)

d. NO_X allowances shall be held in, deducted from, or transferred among NO_X Allowance Tracking System accounts in accordance with 9 VAC 5-140-400 et seq., 9 VAC 5-140-500 et seq., 9 VAC 5-140-600 et seq., and 9 VAC 5-140-800 et seq..

(9 VAC 5-140-60 C.4)

e. A NO_X allowance shall not be deducted in order to comply with the requirements under 9 VAC 5-140-60 C.1 for a control period in a year prior to the year for which the NO_X allowance was allocated.

(9 VAC 5-140-60 C.5)

f. A NO_X allowance allocated by the permitting authority or the administrator under the NO_X Budget Trading Program is a limited authorization to emit one ton of nitrogen oxides in accordance with the NO_X Budget Trading Program. No provision of the NO_X Budget Trading Program, the NO_X Budget permit application, the NO_X Budget permit, or an exemption under 9 VAC 5-140-50 and no provision of law shall be construed to limit the authority of the United States or the State to terminate or limit such authorization.

(9 VAC 5-140-60 C.6)

g. A NO_X allowance allocated by the permitting authority or the administrator under the NO_X Budget Trading Program does not constitute a property right.

(9 VAC 5-140-60 C.7)

h. Upon recordation by the administrator under 9 VAC 5-140-500 et seq., 9 VAC 5-140-600 et seq., or 9 VAC 5-140-800 et seq., every allocation, transfer, or deduction of a NO_X allowance to or from a NO_X Budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NO_X Budget permit of the NO_X Budget unit by operation of law without any further review.

(9 VAC 5-140-60 C.8)

3. Excess emissions requirements.

a. The owners and operators of a NO_X Budget unit that has excess emissions in any control period shall:

(1) Surrender the NO_X allowances required for deduction under 9 VAC 5-140-540 D 1; and

(2) Pay any fine, penalty, or assessment or comply with any other remedy imposed under 9 VAC 5-140-540 D 3.

(9 VAC 5-140-60 D)

C. Recordkeeping and Reporting Requirements.

The following requirements concerning recordkeeping and reporting shall apply:

1. Unless otherwise provided, the owners and operators of the NO_X Budget source and each NO_X Budget unit at the source shall keep on site at the source each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the permitting authority or the administrator.

(9 VAC 5-140-60 E.1)

a. The account certificate of representation for the NO_X authorized account representative for the source and each NO_X Budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 9 VAC 5-140-130; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new account certificate of representation changing the NO_X authorized account representative.

(9 VAC 5-140-60 E.1)

b. All emissions monitoring information, in accordance with 9 VAC 5-140-700 et seq. of this part; provided that to the extent that 9 VAC 5-140-700 et seq. provides for a three-year period for recordkeeping, the three-year period shall apply.

(9 VAC 5-140-60 E.1)

c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_X Budget Trading Program.

(9 VAC 5-140-60 E.1)

d. Copies of all documents used to complete a NO_X Budget permit application and any other submission under the NO_X Budget Trading Program or to demonstrate compliance with the requirements of the NO_X Budget Trading Program.

(9 VAC 5-140-60 E.1)

2. The NO_X authorized account representative of a NO_X Budget source and each NO_X Budget unit at the source shall submit the reports and compliance certifications required under the NO_X Budget Trading Program, including those under 9 VAC 5-140-300 et seq., 9 VAC 5-140-700 et seq., or 9 VAC 5-140-800 et seq.

(9 VAC 5-140-60 E.2)

D. Emission Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports will be provided at the appropriate locations.

(9 VAC 5-50-30 and 9 VAC 5-140-710)]

E. Liability

1. Any person who knowingly violates any requirement or prohibition of the NO_X Budget Trading Program, a NO_X Budget permit, or an exemption under 9 VAC 5-140-50 shall be subject to enforcement pursuant to applicable State or Federal law.

(9 VAC 5-140-60 F.1)

2. Any person who knowingly makes a false material statement in any record, submission, or report under the NO_X Budget Trading Program shall be subject to criminal enforcement pursuant to the applicable State or Federal law.

(9 VAC 5-140-60 F.2)

3. No permit revision shall excuse any violation of the requirements of the NO_X Budget Trading Program that occurs prior to the date that the revision takes effect.

(9 VAC 5-140-60 F.3)

4. Each NO_X Budget source and each NO_X Budget unit shall meet the requirements of the NO_X Budget Trading Program.

(9 VAC 5-140-60 F.4)

5. Any provision of the NO_X Budget Trading Program that applies to a NO_X Budget source or the NO_X authorized account representative of a NO_X Budget source shall also apply to the owners and operators of such source and of the NO_X Budget units at the source.

(9 VAC 5-140-60 F.5)

6. Any provision of the NO_X Budget Trading Program that applies to a NO_X Budget unit or the NO_X authorized account representative of a NO_X budget unit shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under Article 8 (9 VAC 5-140-700 et seq.), the owners and operators and the NO_X authorized account representative of one NO_X Budget unit shall not be liable for any violation by any other NO_X Budget unit of which they are not owners or operators or the NO_X

authorized account representative and that is located at a source of which they are not owners or operators or the NO_X authorized account representative.

(9 VAC 5-140-60 F.6)

F. Effect on Other Authorities.

No provision of the NO_X Budget Trading Program, a NO_X Budget permit application, a NO_X Budget permit, or an exemption under 9 VAC 5-140-50 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_X authorized account representative of a NO_X Budget source or NO_X Budget unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

(9 VAC 5-140-60 G)

IX. Clean Air Interstate Rule (CAIR) Requirements

A. CAIR General Conditions

1. The permittee shall comply with all applicable CAIR requirements (9 VAC 5-140-1010 *et seq.*, 9 VAC 5-140-2010 *et seq.*, 9 VAC 5-140-3010 *et seq.*, and 40 CFR Part 96) by the compliance date in the respective Part of 9 VAC 5 Chapter 140. The CAIR application in Appendix B to this document contains specific conditions and expires upon expiration of this Title V permit.

   (9 VAC 5-80-110, 40 CFR Part 96, and 9 VAC 5 Chapter 140)

X. Appendix

Appendix A

No. 2 Fuel Oil Transfers – Darbytown Power Station

Station Process: The station receives fuel oil by truck transport where the fuel oil from the trucks is transferred into one of the station's two 3,125,000 gallon tanks. Prior to receiving oil one of the fuel oil tanks is identified as the receiving tank and is isolated from service per the station's operating procedure. The tank is valved and tagged closed until the "shipment" is completed and the tank is sampled and analyzed per ASTM methods.

Once the station reviews the fuel oil analyses and confirms that the fuel oil quality complies with the Title V air permit limitations then the fuel oil tank is released for service. This methodology is in accordance with 40 CFR 60 Subpart GG. Copies of the analyses along with the truck manifests and associated volumes are maintained at the station.

Fuel Oil 'Shipment' Definition: A 'shipment' or 'transfer' is a series of truck transport loads of oil. The source of oil may be a Dominion or a vendor owned source. Prior to any fuel movement within the Dominion system the Dominion Fuels Contracts Group assures the oil meets each station's fuel oil quality regulatory requirements.

Appendix B

CAIR Permit Application (see attached)